527, 908

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number
WO 2004/026659 A1

(51) International Patent Classification[7]: B61K 9/08, G01M 7/02

(21) International Application Number: PCT/NZ2003/000216

(22) International Filing Date: 22 September 2003 (22.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
521541 20 September 2002 (20.09.2002) NZ

(71) Applicant and
(72) Inventor: JURY, Brent, Felix [NZ/NZ]; Mahoetahi Road 158, RD 42, Waitara (NZ).

(74) Agent: SCHUCH, Ernest, Robert Schuch & Company; Schuch & Company, P.O. Box 10 615, Wellington (NZ).

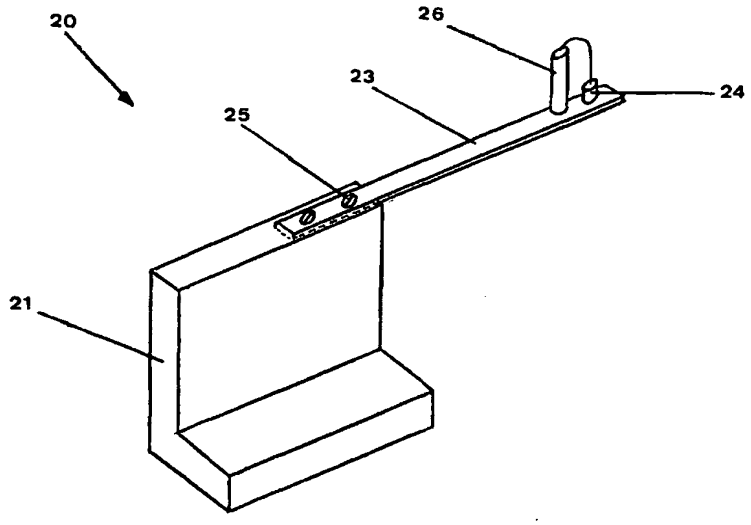
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR AND METHODS OF STRESS TESTING METAL COMPONENTS



(57) Abstract: A tuning device (23) and an apparatus that incorporates the tuning device (23) for use in testing the integrity of a railway line (30) to obtain an improved test signal, the tuning device (23) including an elongate member (23) adapted to be attachable at one end of the railway line (30) being tested in situ or is attachable to an attachment member (21) coupled to the section (10) of railway line (30), and wherein a vibration signal measuring means (24) is adapted to be secured to the other end of the elongate member (23). The apparatus can include a control means (2), a vibration means (3), the tuning device (23) configured and arranged to be attachable to the railway line (30) and a vibration measuring means (24) is attachable to the railway line (3) to directly vibrate the section (10) of the railway line (30), the control means (2) controlling the frequency of vibration and to receive and process measurements of the amplitude of vibration from the tuning device (23) and the frequency of vibration from the vibration measuring means (24).

WO 2004/026659 A1